

AMENDMENTS

Listing of Claims:

The following listing of claims replaces all previous listings or versions thereof:

1. (currently amended) A composition for assessing the presence of at least a first target molecule in a sample comprising ~~a plurality~~ at least a first and a second ~~[[of]]~~ low-to-moderate affinity peptoid binding ~~elements~~ element distributed on a surface of, and operatively coupled to a support, wherein concomitant binding of the first target molecule to two or more ~~of the~~ peptoid binding elements results in a high affinity interaction with the first target molecule, ~~said binding elements being peptides, peptoids (N-substituted oligoglycines) or other peptide-like oligomers.~~
2. (Canceled)
3. (Currently amended) The composition of claim 1, wherein the ~~plurality of~~ peptoid binding elements ~~comprises at least a first and a second binding element having~~ have distinct binding specificity for a target molecule as compared to each other.
4. (Currently amended) The composition of claim 1, wherein a first peptoid binding element is operatively coupled to the second peptoid binding element.
5. (Currently amended) The composition of claim 4, wherein a spacer is operatively coupled to the first peptoid binding element, the peptoid second binding element or both the first and second peptoid binding element.
- 6.-10. (Canceled)
11. (Currently amended) The composition of claim ~~[[6]]~~ 1, wherein the first peptoid binding element is operatively coupled to a terminal monomer of the ~~oligomer~~ second peptoid binding element.

12. (Currently amended) The composition of claim ~~[[6]]~~1, wherein the first peptoid binding element is operatively coupled to an internal monomer of the ~~oligomer~~second peptoid binding element.
13. (Currently amended) The composition of claim ~~[[6]]~~1, wherein a plurality of first peptoid binding elements are operatively coupled to the ~~oligomer~~second peptoid binding element.
14. (Original) The composition of claim 1, wherein the support is a cross-linked polymer bead or a chemically-modified glass slide.
15. (Original) The composition of claim 1, wherein the sample is an environmental sample, a cell lysate, a blood sample, a sputum sample or a urine sample.
16. (Original) The composition of claim 1, wherein the first target molecule further comprises a detectable label.
17. (Original) The composition of claim 1, wherein the first target molecule is a biological molecule or metabolite.
18. (Original) The composition of claim 1, wherein the first target molecule is a polypeptide.
19. (Original) The composition of claim 1, wherein the polypeptide is modified.
20. (Original) The composition of claim 19, wherein the modification is phosphorylation, SUMOylation or ubiquitylation.
21. (Currently amended) The composition of claim 1, wherein the peptoid binding elements are distributed randomly on the surface of the support.

22. (Currently amended) The composition of claim 1, further comprising at least a third and a fourth low-to-moderate affinity peptoid binding element that bind a second target molecule, the third and fourth peptoid binding element distributed on a surface of, and operatively coupled to, the support, wherein concomitant binding of the second target molecule to the third and fourth peptoid binding elements results in a high affinity interaction with the second target molecule.
23. (Currently amended) The composition of claim 22, wherein the third and fourth low affinity peptoid binding elements have distinct binding specificity as compared to each other.
24. (Currently amended) The composition of claim 22, wherein the third and fourth peptoid binding elements have distinct binding specificity as compared to the first and second low affinity peptoid binding elements.
25. (Currently amended) The composition of claim 22, wherein the first and second low affinity peptoid binding elements are segregated from the third and fourth low affinity peptoid binding elements.
26. (Currently amended) The composition of claim 22, wherein the first and second low affinity peptoid binding elements are segregated from the third and fourth low affinity peptoid binding elements on the surface of the support.
27. (Currently amended) The composition of claim 26, wherein the first and second peptoid binding elements, and the third and fourth peptoid binding elements, are distributed randomly on the surface of the support within their respective segregated areas.
28. (Currently amended) A method of determining the presence of a target molecule in a sample comprising:

- a) exposing the sample to a plurality of low-to-moderate affinity peptoid binding elements distributed on a surface of, and operatively coupled to a support, wherein concomitant binding of the target molecule to at least a two of the binding elements results in a specific high affinity interaction with the target molecule, ~~said binding elements being peptides, peptoids (N-substituted oligoglycines) or other peptide-like oligomers;~~ and
 - b) evaluating binding of the target molecule to the peptoid binding elements.
29. (Withdrawn) The method of claim 28, wherein binding is observed by spectroscopy.
30. (Withdrawn) The method of claim 29, wherein spectroscopy is fluorescent spectroscopy.
31. (Withdrawn) The method of claim 29, wherein spectroscopy is magnetic resonance imaging.
32. (Withdrawn) The method of claim 28, wherein the target molecule is a biological molecule or metabolite.
33. (Withdrawn) The method of claim 28, wherein the target molecule is a protein.
34. (Withdrawn) The method of claim 33, wherein the protein is a modified protein.
35. (Withdrawn) The method of claim 34, further comprising
- c) comparing the binding in step b) with the binding of an unmodified protein.
- 36-48. (Canceled)